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Enhance

Well, I can't hold back any longer. Enhance is, simply, the only true second-generation gray-scale program. It does many things the others can't, and what the others can do, Enhance can—for the most part—do better. It's a program with great parts, but its real strength is that all the parts work together to accomplish things no other Mac (or DOS, for that matter) gray-scale program is capable of doing.

I'm told Enhance started out in life as a technical image–analysis and –enhancement program, and if you're doing that kind of work don't even consider any of these other packages. In fact, according to contributing editor and molecular biologist Charles Seiter, whose day job involves enhancing autoradiograms, Enhance beats out Mac and IBM PC image-analysis programs that cost many times its price (see "Bio Bar Code"). But this technical bent shouldn't put off artists and publishers.

Both technical users and artists will appreciate Enhance's powerful image-masking features, for example. To work with just one part or even one tonal range of an image, you duplicate the image, select the part or values you want to work on, and fill the selection with black. This duplicate can now be a mask. Bring up Image Masking, and all painting, filtering, and gray-scale operations will affect only the black regions in the active mask (see "Paint It Black").

Enhance is the only program with masking buffers, but what makes its masking abilities especially useful are the program's unequaled tools for isolating and selecting just about whatever parts of an image you might want to mask. Enhance has two types of autoselect lassos (one shrinks to fit, the other expands like a typical magic wand); and you can precisely set the tolerance of both by telling them how many gray values above and below the touch point to include in the selection. You can also set an absolute threshold for selection—everything above or below value 100, say. Enhance's half-dozen brightness and contrast tools enable you to isolate a given gray value with relative ease. The Threshold tool, for example, has sliders that let you isolate a particular value or range in an image. Clicking on a button brings up a palette from which you can select any value—including black or even a color—to substitute for the selected range.

The rest of the brightness and contrast tools enable you to adjust an image's gray values much more precisely than do the gray-scale features in Digital Darkroom and ImageStudio (though Enhance also duplicates their controls). Particularly nice is the gamma filter, which lightens or darkens an image without chopping off the lows or highs. Moving the slider up or down gives you the same effect you would achieve if you could go into ImageStudio's or Digital Darkroom's gray-map graphs and keep drawing successively deeper smooth curves.

Just as the selection and gray-scale tools work hand-in-hand with the masking features, Enhance's gray-scale editors in turn are augmented by its histogram. Unlike Digital Darkroom's histogram, which provides a plot but no data, Enhance's histogram not only plots the distribution of values in an image but also displays numeric data about such things as the high, low, and mean values. A readout like this may seem superfluous—until you've used one. A histogram can be very useful when you're trying to identify and correct image problems. The histogram updates after filtering to show exactly how an operation changed the image (see "I Don't Know if It's Art, but I Know How Dark It Is").

Enhance's ruler is another of its simple but synergistic features. The ruler calculates the locations of points, the lengths of lines, and the angle between any two lines. Not too impressive. But add the program's ability to compare ruler information from one window with ruler information in another, and to use ruler information to control operations such as scale, rotate, and translate (move), and you start to see the possibilities.

Suppose you want to compare two aerial photographs of your town to see how it has changed in the last ten years, but the photographs were taken from different locations or different altitudes. No problem. Just load both images into memory in split-screen mode and then stretch ruler lines from First to Main streets in both windows. Now you can tell the program to scale the photographs so that the lines are the same size and to rotate the images till they have the same orientation. You could set points on the statue of George Washington in the park, use the Translate command to align the photographs, and superimpose the new town over the old.

If you know the size of something in town, you can calibrate the images to that known quantity in any unit from microns to miles, and measure, say, the town's changing width over the years. You can calibrate the ruler so that it reads distances relative to any point you set, and you can even change the coordinate system so that it displays x and y coordinates according to four different orientations (top left to lower right, lower left to upper right, and so on).

Technical users who like Enhance's ability to compare and measure image elements will be even more impressed by its filtering features. Enhance comes with a selection of about 70 to 80 filters (depending on how you count them). But if those aren't enough, the program has a unique dialog box that enables you to easily modify any of the filters or create new ones (see "Convolution Made Simple").

The prime advantage of developing a second-generation program is that you get to steal the best from everyone and then improve on it. That about characterizes Enhance's interface, which is filled with those nice touches that make a program a pleasure to use. Enhance has an excellent selection of tools, general operation is fast and clean, and the program is less expensive than either ImageStudio or Digital Darkroom.